

IN THE CLAIMS

The current listing of claims follows:

Claim 1. (Previously presented): A resin composition, which comprises:

a saponified ethylene-vinyl acetate resin,

from 0.1 to 3000 ppm, based on the total amount of the saponified ethylene-vinyl acetate resin, of a compound having a molecular weight of at most 1000 and having at least one conjugated double bond,

from 10 to 5000 ppm of at least one second compound selected from the group consisting of higher fatty acid amides and fatty acid salts, expressed as the ppm of free fatty acid relative to the total amount of the saponified ethylene-vinyl acetate resin, and

from 10 to 5000 ppm, of a boron compound, expressed as the ppm of elemental boron in said boron compound relative to the total amount of the saponified ethylene-vinyl acetate resin,

wherein the saponified ethylene vinyl acetate resin has

a methoxy group content ranging from 0.0005 to 1 mol % based on the total moles of monomer units in the resin,

an ethylene content ranging from 5 to 60 mol % based on the total moles of monomer units in the resin, and

a degree of saponification of at least 85 mol % based on the number of moles of vinyl acetate monomer units in the resin.

Claim 2 (Previously Presented): The resin composition of Claim 1, wherein the amount of the compound having a molecular weight of at most 1000 is from 5 to 1500 ppm.

Claim 3 (Previously presented): The resin composition of Claim 1, wherein the compound having a molecular weight of at most 1000 is selected from the group consisting of 1-phenylbutadiene, sorbic acid, 2,4-diphenyl-4-methyl-1-pentene, 1,3-diphenyl-1-butene, 2,3-dimethyl-1,3-butadiene, 4-methyl-1,3-butadiene, 1-phenyl-1,3-butadiene, myrcene and mixtures thereof.

Claim 4 (Previously presented): The resin composition of Claim 1, wherein the saponified ethylene-vinyl acetate resin has a methoxy group content ranging from 0.001 to 0.5 mol %.

Claim 5 (Canceled).

Claim 6 (Previously Presented): The resin composition of Claim 1, wherein the saponified ethylene-vinyl acetate resin comprises from 20 to 55 mol % of polymerized ethylene units.

Claim 7 (Previously Presented): The resin composition of Claim 1, wherein the degree of saponification is at least 98 mol %.

Claim 8 (Canceled).

Claim 9 (Previously presented) The resin composition of Claim 1, wherein the amount of the second compound is 100 to 1000 ppm.

Claim 10 (Previously presented) The resin composition of Claim 1, wherein the second compound is derived from a higher fatty acid having 8 to 30 carbon atoms.

Claim 11 (Previously presented) The resin composition of Claim 1, wherein the second compound is selected from the group consisting of palmitamides, stearamides, oleamides, linolic amides, linolenic amides, ethylene-bis-stearamide, ethylene-bis-oleamide, sodium stearate, calcium stearate, magnesium linolenate, and mixtures thereof.

Claim 12 (Canceled).

Claim 13 (Previously presented) The resin composition of Claim 1, wherein the amount of the boron compound is 100 to 1500 ppm.

Claim 14 (Previously presented) The resin composition of Claim 1, wherein the boron compound is selected from the group consisting of boric acid, orthoboric acid, metaboric acid, tetraboric acid, alkali metal salts of boric acid, alkaline earth metal salts of boric acid, triethyl borate, trimethyl borate, trialkyl borate, borax, boron hydride, and mixtures thereof.

Claim 15 (Original): A product comprising the saponified ethylene-vinyl acetate resin of Claim 1.

Claim 16 (Canceled).

Claim 17 (Canceled).

Claim 18 (Withdrawn): The product of Claim 15, wherein the product has a form selected from the group consisting of a monolayer film, a multilayer film, a bag, a pouch, a tube, a thermoformed container, an injection molded bottle, a blow molded bottle, a laminated film, and a parison.

Claim 19 (Withdrawn): A method for producing the resin composition of Claim 1 comprising:

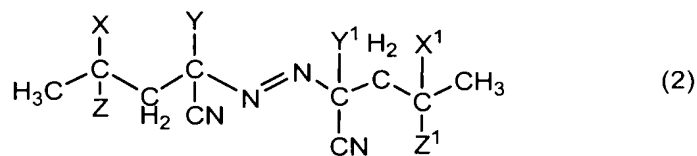
polymerizing a monomer mixture comprising ethylene and vinyl acetate in the presence of a polymerization initiator having an methoxy group, thereby forming an ethylene-vinyl acetate copolymer;

adding a compound having a molecular weight of at most 1000 and at least one conjugated double bond to the ethylene-vinyl acetate copolymer; then

saponifying the ethylene-vinyl acetate copolymer containing a compound having a molecular weight of at most 1000 and at least one conjugated double bond, thereby forming a saponified ethylene-vinyl acetate copolymer,

and adding a higher fatty acid amide or fatty acid salt and a boron compound to said saponified ethylene-vinyl acetate copolymer.

Claim 20 (Withdrawn): The method of Claim 19, wherein the polymerization initiator having a methoxy group has a structure according to formula (2):



wherein X, X¹, Y, Y¹ each independently represent an alkyl group having 1 to 5 carbon atoms, and Z and Z¹ each independently represent an alkoxy group having 1 to 5 carbon atoms and at least one of Z and Z¹ is methoxy.

Claim 21 (Withdrawn): The method of Claim 20, wherein the polymerization initiator having a methoxy group is 2,2'-azobis(4-methoxy-2,4-dimethylvaleronitrile).

Claim 22 (Canceled).

23. (Withdrawn) A method of extruding a product comprising resin composition of Claim 1 comprising:

extruding the saponified ethylene-vinyl acetate resin in a single-layer extrusion apparatus or multi-layer coextrusion apparatus.

24. (Canceled).

25. (Canceled).

Claim 26 (Previously presented) The resin composition of Claim 1, wherein the conjugated double bond containing compound has a functional group selected from the group consisting of a carboxyl group, salts thereof, a hydroxyl group, an ester group, a carbonyl group, an ether group, an amino group, an imino group, an amide group, a cyano group, a diazo group, a nitro group, a sulfone group, a sulfoxide group, a sulfide group, a thiol group, a sulfonic acid group, salts thereof, a phosphoric acid group, salts thereof, a phenyl group, a halogen atom, a double bond and a triple bond.